

IN THE SPECIFICATION

Please amend the Specification as follows:

(Pages of the Applicant's copy of the present Application do not appear to match the pages of the copy used by the Examiner. To avoid confusion, the paragraphs are referenced using the numbered paragraphs of the published patent application, U.S. Publication No. 20070046603.)

Please amend paragraph 0001 of the Publication as follows:

BACKGROUND

This invention relates to methods and apparatus for driving electroluminescent, in particular organic light emitting diodes (OLED) displays using multi-line addressing (MLA) techniques. Embodiments of the invention are particularly suitable for use with so-called passive matrix OLED displays. This application is one of a set of three related applications sharing the same priority date.

Please amend paragraph 0023 of the Publication as follows:

OVERVIEW

There is a continuing need for techniques which can improve the lifetime of an OLED display. There is a particular need for techniques which are applicable to passive matrix displays since these are very much cheaper to fabricate than active matrix displays. Reducing the drive level (and hence brightness) of an OLED can significantly enhance the lifetime of the device – for example halving the drive/brightness of the OLED can increase its lifetime by approximately a factor of four. The inventors have recognised that multi-line addressing techniques can be employed to reduce peak display drive levels, in particular in passive matrix OLED displays, and hence increase display lifetime.

Please amend paragraph 0036 of the Publication as follows:

Brief Description of the Drawings

These and other aspects of the of the invention will now be further described, by way of example only, with the reference to the accompanying figures in which:

Please amend paragraph 0049 of the Publication as follows:

Detailed Description

Consider a pair of rows of a passive matrix OLED display comprising a first row A, and a second row B. In a conventional passive matrix drive scheme the rows would be driven as shown in table 1 below, with each row in either a fully-on state (1.0) or a fully-off state (0.0).

Please amend paragraph 0133 of the Publication as follows:

No doubt many other effective alternatives will occur to the skilled person. It will be understood that the invention is not limited to the described embodiments and encompasses modifications apparent to those skilled in the art lying within the spirit and scope of the claims appended hereto.

What is claimed is:

Please amend the Abstract as follows:

Multi-Line Addressing Methods and Apparatus

~~This invention relates to methods and apparatus for driving electroluminescent, in particular organic light emitting diodes (OLED) displays using multi-line addressing (MLA) techniques. Embodiments of the invention are particularly suitable for use with so-called passive matrix OLED displays.~~

A current generator for an electroluminescent display driver, ~~the current generator comprising:~~ comprises a first, reference current input to receive a reference current; a second, ratioed current input to receive a ratioed current; a first ratio control input to receive a first control signal input; a controllable current mirror having a control input coupled to ~~said the~~ said first ratio control input, a current input coupled to ~~said the~~ said reference current input, and an output coupled to ~~said the~~ said ratioed current input; ~~said the~~ said current generator being configured such that a signal on ~~said the~~ said control input controls a ratio of ~~said the~~ said ratioed current to ~~said the~~ said reference current.

Figure 5e.

Please amend paragraph 0080 of the Publication as follows (the hyperlink is removed):

D. D. Lee, H. S. Seung. Algorithms for non-negative matrix factorization ; P. Paatero, U. Tapper. Least squares formulation of robust non-negative factor analysis. Chemometr. Intell. Lab. 37 (1997), 23-35; P. Paatero. A weighted non-negative least squares algorithm for three-way 'PARAFAC' factor analysis. Chemometr. Intell. Lab. 38 (1997), 223-242; P. Paatero, P. K. Hopke, etc. Understanding and controlling rotations in factor analytic models. Chemometr. Intell. Lab. 60 (2002), 253-264; J. W. Demmel. Applied numerical linear algebra. Society for Industrial and Applied Mathematics, Philadelphia. 1997; S. Junto, P. Paatero. Analysis of daily precipitation data by positive matrix factorization. Environmetrics, 5 (1994), 127-144; P. Paatero, U. Tapper. Positive matrix factorization: a non-negative factor model with optimal utilization of error estimates of data values. Environmetrics, 5 (1994), 111-126; C. L. Lawson, R. J. Hanson. Solving least squares problems. Prentice-Hall, Englewood Cliffs, NJ, 1974; Algorithms for Non-negative Matrix Factorization, Daniel D. Lee, H. Sebastian Seung, pages 556-562, Advances in Neural Information Processing Systems 13, Papers from Neural Information Processing Systems (NIPS) 2000, Denver, CO, USA. MIT Press 2001; and Existing and New Algorithms for Non-negative Matrix Factorization By Wenguo Liu & Jianliang Yi (www.dcfll.gov/DCCI/rdwg/nmf.pdf www.dcfll.gov/DCCI/rdwg/nmf.pdf; source code for the algorithms discussed therein can be found at http://www.cs.utexas.edu/users/liuwg/383CProject/CS_383C_Project.htm).